

July 14, 2000

Members, Alternates, and Observers  
California Traffic Control Devices Committee:

Attached for your use is, copy of the minutes from the CTCDC meeting held in Caltrans District 12 Office, in Irvine On March 15, 2000. The minutes of the meeting will be available on the Caltrans Website.

The next CTCDC meeting is scheduled for Thursday, August 17, 2000. The meeting will be in Sacramento, in the basement Auditorium of the Caltrans Headquarters Office, at 1120 N Street.

Sincerely,

Devinder Singh  
Executive Secretary, CTCDC

Attachment

## **MINUTES**

### **CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE MEETING OF MARCH 15, 2000**

The first meeting of the CTCDC in 2000 convened at the Caltrans District 12 Office, in Irvine, CA, on March 15, 2000.

Chairman Ray Mellen opened the meeting at 9:05 a.m. with the introduction of members and guests. He thanked all those in attendance for attending and thanked District 12 for hosting the meeting at its facility. The Chairman introduced Margaret Shepard who recorded and took notes during the meeting as Jack Kletzman's interim replacement.

The following members, alternates and guests were in attendance:

<b>ATTENDEES</b>	<b>ORGANIZATION</b>	<b>TELEPHONE</b>
Members (Voting)		
Ray Mellen Chairman	Auto Club of Southern California Costa Mesa	(714) 885-2301
Jim Larsen Vice Chairman	California State Association of Counties County of Tulare	(559) 733-6291
Merry Banks	California State Automobile Association, San Francisco	(415) 565-2297
Bill Peters	California Highway Patrol Sacramento	
Dick Folkers	League of California Cities City of Palm Desert	(760) 346-0611
Farhad Mansourian	California State Association of Counties County of Marin	(415) 499-6570
Gerry Meis	California Department of Transportation Sacramento	(916) 654-4551
Wayne Tanda	League of California Cities City of San Jose	(408) 277-4945

ATTENDEES	ORGANIZATION	TELEPHONE
Richard Backus	Auto Club of Southern California	(714) 885-2326
Peter Tanner	City/County of San Francisco	(415) 554-2396
Mike Sallaberry	City/County of San Francisco	(415) 554-2303
Michael A. Harrison	Light Guard Systems	(707) 542-4547
John Squier	Assistant Deputy Director, LA Co.	(626) 458-5900
Warran Tham	LA DOT	(213) 897-0350
John Fisher	LA DOT	(213) 580-1189
Mark Greenwood	City of Palm Desert	(760) 776-6450
Anthony Brine	City of Newport Beach	(949) 644-3329
Janna McKhann	NexTech	(714) 289-8940
Matt Schmitz	FHWA, Sacramento	(916) 498-5850
Paul Ngayln	City of Lynwood	(310) 603-0220
Khang Vu	City of Glendale	(818) 548-3960
David Royer	University of California – ITS	(661) 255-6556
Mike Deckard	Pacific Lighting Sales	(949) 597-1633
Bassam Alaskey	City of Fountain Valley	(714) 393-4443
Greg Edwards	Caltrans, Headquarters, Sacramento	(916) 654-3507

## MINUTES

There was a motion to approve the minutes of the last meeting on November 19, 1999, in Sacramento, with a recommendation for correction of Mr. Larsen's phone number as listed in the minutes. There being no other corrections, a motion to approve the minutes was made by Farhad Mansourian and seconded by Dick Folkers. Motion carried 8-0.

Gerry Meis made a brief comment about the field trip to Disneyland to view the red LED lights that were placed by the City of Anaheim near Disneyland. A field trip is scheduled at the intersection of Katella Avenue and West Street (Committee members have been given maps to the area). The meeting is planned for 2:00 p.m. after the California Traffic Control Devices Committee adjourns.

### **99-1 GAPS FOR PEDESTRIAN CROSSING**

Ray Mellen said this item was discussed previously. Norm Suker was invited to the podium to refresh the Committee. In summary, Norm Suker said he was a consultant and owned his own firm since August 1989. He was involved in a case as a technical expert where a young child was hit in a crosswalk. His letters dated Oct. 28, 1998 and November 5, 1999, basically cover the details. The flashing beacon (FB) warrant as adopted by Caltrans indicates the volume of traffic on the street and a minimum number of school pedestrians (40). He wants to know where the number 40 came from because there is no minimum number in the federal manual. Norm Suker suggested the state manual refer to the federal manual. The federal manual indicates engineering judgement be used.

In summary, Gerry Meis told the Committee that he drafted the response for the Committee. The state manual is more specific than the federal manual. The federal manual is very general. Gerry deferred to either the cities or counties that are represented at today's meeting, if they want to pursue it further.

Ray Mellen asked for comments from the rest of the Committee. Wayne Tanda thought there could be greater clarity in the state manual. Wayne said there is no mention of gaps in the Caltrans Traffic Manual Section 10-05, flashing yellow beacons.

**99-1 GAPS FOR PEDESTRIAN CROSSING** (continued)

Gerry Meis again stated he'd defer to the cities and counties. If anyone wants to volunteer to do the study and come up with another recommended number, he will go along with it as long as the Committee concurs. Gerry doesn't want to put a "Shall" condition because there are so many different situations. Gerry thinks it should be a "May" condition.

Ray Mellen questioned 40 as the right number. Wayne Tanda said San Jose uses that number as a threshold. Wayne thinks gaps should be considered prior to the decision on the flashers and that should be fully stated rather than implied and referred to in another chapter.

Dick Folkers thought one of the reasons for having the federal manual is to get uniformity throughout the United States as much as possible and then each state. Those states that have their own manual, the attempt is to take the federal wisdom and impart that in their state manual. It should not be mandatory, it should be permissive. Dick suggested forming a sub-committee involving representatives from Caltrans, a county and a city. The sub-committee could study the City of San Jose's warrant or other resources and come up with recommendations.

Ray Mellen said he would entertain a motion along the lines that Dick had suggested that a county, a city and Caltrans representative work on this to see if there is a way to address Norm's concern.

Gerry Meis asked if Caltrans could be exempt from participation on the sub-committee. Wayne Tanda thought the sub-committee should be restricted to Section 10-5 flashing beacon and Section 10-6 traffic signals. The point is that they do not appear to be in substantial compliance with the federal Manual On Uniform Traffic Control Devices (MUTCD). Gerry Meis explained the phrase substantial conformance. It says in its totality it must be in substantial conformance. Matt Schmitz from Federal Highway Administration (FHWA) agreed with Gerry's statement.

Ray Mellen solicited comments from the audience. John Fisher with the City of Los Angeles suggested that the state manual could be improved by emphasizing gaps in traffic. Also a minimum number of pedestrians is probably appropriate. He supports the motion.

**99-1 GAPS FOR PEDESTRIAN CROSSING** (continued)

Dick Folkers clarified that the motion be for elaborating on Section 10-5 and 10-6, and making it easier for the users. Wayne Tanda asked to consider the federal MUTCD in that assessment. Ray Mellen asked for the motion from an appropriate Committee member.

**MOTION**: By Dick Folkers, seconded by Merry Banks, to establish a sub-committee composed of representatives from the City of San Jose, a County and AAA, to resolve the concerns that have been brought up by the letter from Norm Suker dated October 28, 1998. One member opposed the motion. Motion carried 7-1.

**Action**: Item continued. The sub-committee of the CTCDC shall report back to the full Committee with recommendations.

**99-9 LED ENHANCED PAVEMENT MARKERS**

Item 99-9 was completed in November 19, 1999, meeting. Dick Folkers asked for this to be on the agenda for some clarification.

In summary, Dick Folkers indicated that Caltrans had approved this and District 10 Stockton is proposing to use for one of their project in the cities of Escalon and Ripon. It means other people could proceed to use this without having to come before the Committee to request for experimentation. The question is does it meet Caltrans specifications? Gerry Meis called attention to the letter dated January 14, 2000, which was addressed to Ray Mellen. Caltrans position on the raised pavement markers is, if they are used in a longitudinal pattern and are the same color and configuration as worded in the Caltrans Traffic Manual, they are not a new traffic control device. The letter addresses the transverse use of raised pavement markers (internally illuminated). There are no state standards in the Caltrans Traffic Manual for using raised pavement markers in a transverse pattern. Dick Folkers thinks there should be a decision. The Committee should discuss it. Dick deferred to any other comments.

Jim Larsen agrees that as a longitudinal marker, it is not a new device. Gerry Meis reminded the Committee that it was tested both with the retroreflective material and the LED. If the LED is out, the retroreflective material does not meet the minimum specifications for Caltrans retroreflective

**99-9 LED ENHANCED PAVEMENT MARKERS (continued)**

raised pavement markers. It doesn't meet the specifications to be on our Qualified Products List (QPL). It is a new product. In Gerry's opinion, it does not have to be approved as a new traffic control device. Jim Larsen agreed that no experimentation is necessary. Gerry Meis further stated that the year 2000 MUTCD does address raised pavement markers in a transverse pattern.

Ray Mellen asked if there were additional comments from other Committee members. Wayne Tanda was concerned that the device doesn't meet the standards of the state. Gerry Meis disagreed in that he was referring specifically to the Caltrans QPL. For example stop signs: if a vendor comes in and wants to sell Caltrans a stop sign, it will be tested and if passed, it will be put on the QPL. But that doesn't mean that the City of San Jose has to live by Caltrans specifications. Caltrans does not dictate to cities and counties what level of retroreflectivity to use. Caltrans specifications are used by the Caltrans lab to make a determination whether or not a particular device will go on the QPL. There is no requirement in the state manual to use the Caltrans QPL.

Jim Larsen said we try to use the Caltrans QPL, but doesn't always do it. Gerry Meis does not think there is a risk by using devices that are not on the Caltrans QPL. Dick Folkers said most of local agencies try to use what is on the Caltrans list because of liability and litigation issues. Dick further stated most people would prefer to use products that are on the Caltrans QPL. Gerry Meis said it's a judgment call by the agency.

Dick Folkers reiterated his concern about transverse application, such as a supplement to a crosswalk. The transverse use should be dealt with in the same manner as the longitudinal use. Dick Folkers suggested getting a resolution on the decision, because it may come back again.

Janna McKhann reminded the Committee there is nothing in the state manual regarding pavement markers for crosswalks.

Wayne Tanda suggested a new agenda item for the use of Raised Pavement Markers (RPMs) in a transverse application.

Mike Harrison from Light Guard Systems mentioned the federal MUTCD is being revised for the purposes of inclusion of the internally illuminated raised pavement marker. The illuminated raised

**99-9 LED ENHANCED PAVEMENT MARKERS** (continued)

pavement markers for use at crosswalk is under Section 4-L and comments are due from States on or before June 30, 2000.

Wayne Tanda reminded the Committee that **Item 99-9 was completed in November 19, 1999, Committee meeting.** The new item should be the use of RPM as a transverse application and a sub-committee should review or research this matter and bring back to the Committee. The sub-committee would prepare or evaluate the situation, it may be a small survey and may be a review of what's going on at the federal level and here at the state level for a recommendation. Dick Folkers suggested the sub-committee be formed under Caltrans.

Ray Mellen decided that Jim Larsen would be the chair of the sub-committee. Gerry Meis accepted participation.

**MOTION**: By Wayne Tanda, seconded by Dick Folkers, basically to have a sub-committee chaired by Jim and made up of Jim and Dick and support from FHWA and Caltrans to survey and access the use of RPMs with respect to transverse application. Motion carried 8-0.

**Action**: New item would be "USE OF RPM FOR TRANSVERSE PLACEMENT"

**00-1 BICYCLE PAVEMENT MARKING**

Ray Mellen introduced the Agenda Item 00-1 of year 2000. Wayne Tanda is sponsoring this item.

Wayne Tanda introduced two gentlemen from the City of San Francisco, Mike Sallaberry, a traffic engineer and Peter Tanner, bicycle manager/coordinator. In summary, Mike Sallaberry wanted approval from the State of California for class 3 bicycle routes. It is proposed to place arrows on the roadway with class 3 bike routes. This arrow has been used in Denver and Chicago. A benefit of this arrow is that among other reasons it will remind motorists that cyclists have the rights of the road. Also by placing the arrow at a certain distance from the parking lane, it encourages a path of travel out of the door zone. In San Francisco, there have been two fatalities in the last two years from cyclists hitting doors. Mike is proposing experimentation for about one year. Evaluation of the project involves reducing the conflict between motorists and cyclists in a narrow curb lane. It



**00-1 BICYCLE PAVEMENT MARKING** (continued)

will most likely incorporate accident numbers. This is basically a request for a one-year experimentation. Arrows will be placed about 12 feet from the curb face. The door zone was determined by taking readings of 100 car door openings. Eighty-five percent of automobile doors open to 9-foot 6-inch. The bike route signing would be there and this is supplemental. On bike routes, there will be the words "bike route", and on non-bike routes, there will be just the arrow itself. Cyclists will be encouraged if they are going to be on the signed route, it is better to stay in the middle of lane instead of the door zone. Denver has collected hard data and there have been no complaints. Chicago didn't have any data. There was a study done by the UMC Highway Safety Research Center in Gainesville, Florida, which showed significant change in rider habits. California Vehicle Code (CVC) 21202 does allow cyclists moving to the left to avoid danger or otherwise for safety.

Ray Mellen asked Bill Peters to clarify if a bicyclist is permitted in the roadway. Bill Peters said a cyclist is permitted in the roadway, but is required to ride as far to the right as practicable. It's not practicable for a cyclist to be out in the middle of the roadway.

**MOTION**: By Wayne Tanda that the City of San Francisco address the concerns heard today including but not limited to what will define success quantitatively. Secondly, to have the opinion of the local law enforcement agency (San Francisco PD). Seconded by Dick Folkers with a recommendation to report on what has been done in Colorado and other places where there is a similar program. Ray suggested contacting Matt Schmitz with respect to the FHWA's position. MOTION carried 8-0.

**Action**: Item continued.

**00-2 FLASHING RED ON RADAR SPEED TRAILER**

Gerry Meis introduced Mike Deckard of Pacific Lighting Sales and briefed the Committee about radar speed trailers. Gerry further told the Committee that the color red in a flashing mode is a violation of both the federal MUTCD and the Caltrans Traffic Manual. Mike was invited to the podium to answer any questions from the Committee on this issue.

**00-2 FLASHING RED ON RADAR SPEED TRAILER (Continued)**

In summary, Mike Deckard said that police departments have been requesting a flashing red speed display for radar trailers to slow traffic. When the speed is higher than the posted speed the display begins to flash red. Mike is looking for some guidance on using red flashing for speed trailers.

Bill Peters is not sure how this trailer falls under the auspices of the Committee. It is not an advisory sign or regulatory sign. Ray Mellen further stated it is not a traffic control device. Matt Schmitz said that he had consulted with their headquarters and got their opinion. Based on their opinion it is a traffic control device. The FHWA believes this warrants a request for experimentation and that it is in fact a traffic control device if it is flashing red. Gerry Meis clarified to the Committee that Mike is not requesting experimentation. Mike Deckard said his company is not supplying trailers outside of California. Merry Banks thought it should not be green or red, amber is a possibility, because it tells the motorist to use caution and slow down. Mike Deckard said there are a couple of agencies that have elected to use a white display for traffic travelling below or at the posted speed limit and then yellow flash when it is exceeded.

Ray Mellen was intrigued by it being a traffic control device. Matt Schmitz thought it is an informational sign and it does have an effect on traffic. Gerry Meis believes it is a traffic control device on basis of the CVC, which generally includes virtually everything on the roadway. Wayne Tanda thought it was a traffic control device. Wayne Tanda said it has not come to the Committee before, but it's just another high tech version of what probably all traffic control devices will become some day. Wayne agrees with everybody that a flashing red would provide the wrong connotation. John Squier from LA County stated that CVC Section 25269 states that no person shall display a flashing or burning red light on a vehicle unless it's an extreme emergency or permitted by Section 21055. Under this definition, a flashing red light means stop, look and go.

Ray Mellen suggested that the Committee go on record as discouraging the use of flashing red with respect to speed display boards or trailers. Wayne Tanda suggested adding that the FHWA be consulted for further review and experimentation.

**MOTION** : By Wayne Tanda, seconded by Farhad Mansourian. The use of flashing red is not recommended for radar speed trailers. The FHWA shall be consulted for further review and experimentation. Motion carried 8-0. **Action:** Item completed

## **INFORMATION ITEMS**

### **93-18 CROSSWALKS SEQUENTIAL LIGHTING**

Gerry Meis will send a letter out to all agencies that have had experimental installations, asking them to provide evaluation results.

Action: Caltrans to develop standards and specifications for crosswalks sequential lighting.

### **ITEM 00-1 JAKE BRAKE SIGNS**

Gerry Meis briefed the Committee about “Jake Brake” signs. The Committee has addressed this issue before. The City of Auburn will probably come in with a request to experiment at the next Committee meeting.

Action: Item Continued

## **TABLED ITEM**

### **99-11 MUTCD ADOPTION BY CALTRANS**

Gerry updated the Committee about the federal MUTCD adoption by Caltrans. Cities and counties are not the only ones that deal with the Caltrans Traffic Manual, and there are a lot of others that use the state manual too. Industry strongly supports the concept. A more in-depth presentation is planned during next meeting.

Action: Item Continued.

## **OFF THE AGENDA DISCUSSION**

Ray Mellen mentioned that the national committee is meeting in San Diego during the week of June 12, 2000. He suggested that the Committee meet during the same week to take advantage of the opportunity.

Farhad suggested June 14, 2000, which appears to be the first day of the national meeting.

Ray Mellen said he would tentatively try for the 14th of June, but will discuss with Caltrans to find if the date is achievable.

Wayne Tanda commented that he found the written briefings in this meeting's packette very useful. It is very much appreciated. He thanked Gerry Meis. Ray Mellen agreed and said that was very helpful.

#### **ADJOURNMENT**

**MOTION:** By Merry Banks, seconded by Gerry Meis for adjournment

Motion carried. Ray Mellen adjourned the meeting at 12:25 PM.